

CD109 Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 190	Source/Isotype: Rabbit	UniProt ID: #Q6YHK3	Entrez-Gene Id: 135228
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Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

CD109 Antibody recognizes endogenous levels of total CD109 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly653 of human CD109 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

CD109 is a glycosylphosphatidylinositol (GPI)-linked glycoprotein that belongs to the alpha2-macroglobulin family of thioester containing proteins (1). CD109 is associated with TGF-beta receptor I (TbRI) and inhibits TGF-beta signaling (2,3). Cleavage of CD109 at its Furin cleavage site results in the release of its large amino-terminal domain, which then binds to the TGF-beta receptor I to inhibit TGF-beta signaling (4-7). CD109 is expressed on a subset of CD34+ bone marrow cells and mesenchymal stem cells, activated platelets, activated T cells, endothelial cells, and a wide variety of tumors (8-10). Elevated CD109 expression has been considered a diagnostic/prognostic marker for several types of cancers (11-14).

Background References

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6. Zhou, S. et al. (2017) *Oncotarget* 8, 95632-47.
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11. Emori, M. et al. (2015) *J Surg Oncol* 111, 975-9.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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